Property Condition Assessment

Sheffield Elementary School 43 Crocker Ave

Turners Falls, MA



Prepared for:

Gill-Montague Regional School District

35 Crocker Avenue

Montague, MA 02109

November 5, 2020

Table of Contents

1.2 Condition 1.3 Summary of Costs 2 PROJECT INFORMATION 3 OBJECTIVE 3.1 Objective 3.2 Scope of Report 4 METHODOLOGY 4.1 Guide Specification 4.2 Documentation Review 4.3 Interviews 4.4 Walk-Through Survey 4.5 Opinion of Probable Costs 5 DESCRIPTIONS & OBSERVATIONS 5.1 Site & Features at Grade 5.2 Roofing 5.3 Exterior Walls 5.4 Structural Systems 5.5 Interior Elements 5.6 Specialities, Equipment and Special Construction 5.7 Vertical Transportation 5.8 Heating, Ventiliation and Air Conditioning 5.9 Plumbing Systems 5.10 Fire Protection 5.11 Electrical System, Telephone & Security 5.12 Lighting 5.13 Fire Alarm & Life Safety 5.14	1		TIVE SUMMARY	3
1.3 Summary of Costs 2 PROJECT INFORMATION 6 3 OBJECTIVE 7 3.1 Objective 3.2 3.2 Scope of Report 4 4 METHODLOGY 8 4.1 Guide Specification 4.2 4.2 Documentation Review 4.3 4.4 Walk-Through Survey 4.5 Opinion of Probable Costs 5 DESCRIPTIONS & OBSERVATIONS 11 5.1 Site & Features at Grade 1 5.2 Roofing 1 5.3 Exterior Walls 1 5.4 Structural Systems 1 5.5 Interior Elements 1 5.6 Specialties, Equipment and Special Construction 1 5.7 Vertical Transportation 2 5.8 Heating, Ventilation and Air Conditioning 2 5.9 Plumbing Systems 2 5.10 Fire Protection 2 5.11 Electrical System, Telephone &				3
2 PROJECT INFORMATION 6 3 OBJECTIVE 7 3.1. Objective 3.2. Scope of Report 4 METHODOLOGY 8 4.1. Guide Specification 4.2. Documentation Review 4.3. Interviews 4.4. Walk-Through Survey 4.5. Opinion of Probable Costs 5 5 DESCRIPTIONS & OBSERVATIONS 11 5.1. Site & Features at Grade 1 5.2. Roofing 1 5.3. Exterior Walls 1 5.4. Structural Systems 1 5.5. Interior Elements 1 5.6. Specialties, Equipment and Special Construction 1 5.7. Vertical Transportation 2 5.8. Heating, Ventilation and Air Conditioning 2 5.9. Plumbing Systems 2 5.10. Fire Protection 2 5.11. Electrical System, Telephone & Security 2 5.12. Lighting 2 5.13. Fire Alarm & Life Safety 2 5.14. Accessibility Review 2 5.15. Environmental 3 6 PHOTOGRAPHS 3 5.1 Interior Elements				3 5
3 OBJECTIVE 3.1. Objective 3.2. Scope of Report 4 METHODOLOGY 8 4.1. Guide Specification 4.2. Documentation Review 4.3. Interviews 4.4. Walk-Through Survey 4.5. Opinion of Probable Costs 1 5 DESCRIPTIONS & OBSERVATIONS 11 5.1. Site & Features at Grade 1 5.2. Roofing 1 5.3. Exterior Walls 1 5.4. Structural Systems 1 5.5. Interior Elements 1 5.6. Specialties, Equipment and Special Construction 1 5.7. Vertical Transportation 2 5.8. Heating, Ventilation and Air Conditioning 2 5.9. Plumbing Systems 2 5.10. Fire Protection 2 5.11. Electrical System, Telephone & Security 2 5.12. Lighting 2 5.13. Fire Alarm & Life Safety 2 5.14. Accessibility Review 2 5.15. Environmental 3 6 PHOTOGRAPHS 3 5.1 Site Features at Grade 3 5.2 Roofing 3 a	2			
3.1. Objective 3.2. Scope of Report 4 METHODOLOGY 8 4.1. Guide Specification 4.2. Documentation Review 4.3. Interviews 4.4. Walk-Through Survey 4.5. Opinion of Probable Costs 1 5 DESCRIPTIONS & OBSERVATIONS 11 5.1. Site & Features at Grade 1 5.2. Roofing 1 5.3. Exterior Walls 1 5.4. Structural Systems 1 5.5. Interior Elements 1 5.6. Specialties, Equipment and Special Construction 1 5.7. Vertical Transportation 2 5.8. Heating, Ventilation and Air Conditioning 2 5.9. Plumbing Systems 2 5.10. Fire Protection 2 5.11. Electrical System, Telephone & Security 2 5.12. Lighting 2 5.13. Fire Patarm & Life Safety 2 5.15. Environmental 3 6 PHOTOGRAPHS 3				
3.2. Scope of Report 4 METHODLOGY 8 4.1. Guide Specification 4.2. Documentation Review 4.3. Interviews 4.4. Walk-Through Survey 4.5. Opinion of Probable Costs 5 DESCRIPTIONS & OBSERVATIONS 11 5.1. Site & Features at Grade 1 5.2. Roofing 1 5.3. Exterior Walls 1 5.4. Structural Systems 1 5.5. Interior Elements 1 5.6. Specialties, Equipment and Special Construction 1 5.7. Vertical Transportation 2 5.8. Heating, Ventilation and Air Conditioning 2 5.9. Plumbing Systems 2 5.10. Fire Protection 2 5.11. Electrical System, Telephone & Security 2 5.12. Lighting 2 5.13. Fire Alarm & Life Safety 2 5.14. Accessibility Review 2 <	3			
4 METHODOLOGY 8 4.1. Guide Specification 4.2. Documentation Review 4.3. Interviews 4.4. Walk-Through Survey 4.5. Opinion of Probable Costs 5 DESCRIPTIONS & OBSERVATIONS 5.1. Site & Features at Grade 1 5.2. Roofing 1 5.3. Exterior Walls 1 5.4. Structural Systems 1 5.5. Interior Elements 1 5.6. Specialties, Equipment and Special Construction 1 5.7. Vertical Transportation 2 5.8. Heating, Ventilation and Air Conditioning 2 5.9. Plumbing Systems 2 5.10. Fire Protection 2 5.11. Electrical System, Telephone & Security 2 5.12. Lighting 2 5.13. Fire Alarm & Life Safety 2 5.15. Environmental 3 6 PHOTOGRAPHS 3 <th></th> <th></th> <th>•</th> <th>7 7</th>			•	7 7
4.1. Guide Specification 4.2. Documentation Review 4.3. Interviews 4.4. Walk-Through Survey 4.5. Opinion of Probable Costs 5 DESCRIPTIONS & OBSERVATIONS 5.1. Site & Features at Grade 1 5.2. Roofing 1 5.3. Exterior Walls 1 5.4. Structural Systems 1 5.5. Interior Elements 1 5.6. Specialties, Equipment and Special Construction 1 5.7. Vertical Transportation 2 5.8. Heating, Ventilation and Air Conditioning 2 5.9. Plumbing Systems 2 5.10. Fire Protection 2 5.11. Electrical System, Telephone & Security 2 5.12. Lighting 2 5.13. Fire Patertion 2 5.14. Accessibility Review 2 5.15. Environmental 3 6 PHOTOGRAPHS 31 5.1 Site Features at Grade 3	1			
4.2. Documentation Review 4.3. Interviews 4.4. Walk-Through Survey 4.5. Opinion of Probable Costs 5 DESCRIPTIONS & OBSERVATIONS 5.1. Site & Features at Grade 1 5.2. Roofing 1 5.3. Exterior Walls 1 5.4. Structural Systems 1 5.6. Specialties, Equipment and Special Construction 1 5.7. Vertical Transportation 2 5.8. Heating, Ventilation and Air Conditioning 2 5.9. Plumbing Systems 2 5.10. Fire Protection 2 5.11. Electrical System, Telephone & Security 2 5.12. Lighting 2 5.13. Fire Alarm & Life Safety 2 5.14. Accessibility Review 2 5.15. Environmental 3 6 PHOTOGRAPHS 31 5.1 Site Features at Grade 3 5.2 Roofing 3 5.5 Interior Elements 4 <th>4</th> <th></th> <th></th> <th>8</th>	4			8
4.4. Walk-Through Survey 4.5. Opinion of Probable Costs 5 DESCRIPTIONS & OBSERVATIONS 11 5.1. Site & Features at Grade 1 5.2. Roofing 1 5.3. Exterior Walls 1 5.4. Structural Systems 1 5.5. Interior Elements 1 5.6. Specialties, Equipment and Special Construction 1 5.7. Vertical Transportation 2 5.8. Heating, Ventilation and Air Conditioning 2 5.9. Plumbing Systems 2 5.10. Fire Protection 2 5.11. Electrical System, Telephone & Security 2 5.12. Lighting 2 5.13. Fire Alarm & Life Safety 2 5.14. Accessibility Review 2 5.15. Environmental 3 6 PHOTOGRAPHS 3 5.1 Site Features at Grade 3 5.2 Roofing 3 5.5 Interior Elements 4 5.6				8
4.5. Opinion of Probable Costs 5 DESCRIPTIONS & OBSERVATIONS 11 5.1. Site & Features at Grade 1 5.2. Roofing 1 5.3. Exterior Walls 1 5.4. Structural Systems 1 5.5. Interior Elements 1 5.6. Specialties, Equipment and Special Construction 1 5.7. Vertical Transportation 2 5.8. Heating, Ventilation and Air Conditioning 2 5.9. Plumbing Systems 2 5.10. Fire Protection 2 5.11. Electrical System, Telephone & Security 2 5.12. Lighting 2 5.13. Fire Alarm & Life Safety 2 5.14. Accessibility Review 2 5.15. Environmental 3 6 PHOTOGRAPHS 31 5.1 Site Features at Grade 3 5.2 Roofing 3 a. Exterior Walls 3 5.2 Roofing 3 5.5 Interior Elements 4 5.6 Specialties, Equipment and Special Construction 4 5.9 Plumbing 5 5.10 Fire Protection 5				8
5 DESCRIPTIONS & OBSERVATIONS 11 5.1. Site & Features at Grade 1 5.2. Roofing 1 5.3. Exterior Walls 1 5.4. Structural Systems 1 5.5. Interior Elements 1 5.6. Specialties, Equipment and Special Construction 1 5.7. Vertical Transportation 2 5.8. Heating, Ventilation and Air Conditioning 2 5.9. Plumbing Systems 2 5.10. Fire Protection 2 5.11. Electrical System, Telephone & Security 2 5.12. Lighting 2 5.13. Fire Alarm & Life Safety 2 5.14. Accessibility Review 2 5.15. Environmental 3 6 PHOTOGRAPHS 31 5.1 Site Features at Grade 3 5.2 Roofing 3 a. Exterior Walls 3 5.2 Roofing 3 5.5 Interior Elements 4 5.6 Specialties, Equipment and Special Construction 4 5.9 Plumbing 5 5.10 Fire Protection 5			The state of the s	8
5.1. Site & Features at Grade 1 5.2. Roofing 1 5.3. Exterior Walls 1 5.4. Structural Systems 1 5.5. Interior Elements 1 5.6. Specialties, Equipment and Special Construction 1 5.7. Vertical Transportation 2 5.8. Heating, Ventilation and Air Conditioning 2 5.9. Plumbing Systems 2 5.10. Fire Protection 2 5.11. Electrical System, Telephone & Security 2 5.12. Lighting 2 5.13. Fire Palarm & Life Safety 2 5.14. Accessibility Review 2 5.15. Environmental 3 6 PHOTOGRAPHS 31 5.1 Site Features at Grade 3 5.2 Roofing 3 a. Exterior Walls 3 5.2 Roofing 3 a. Exterior Walls 3 5.5 Interior Elements 4 5.6 <	_			
5.2. Roofing 1. 5.3. Exterior Walls 1. 5.4. Structural Systems 1. 5.5. Interior Elements 1. 5.6. Specialties, Equipment and Special Construction 1. 5.7. Vertical Transportation 2. 5.8. Heating, Ventilation and Air Conditioning 2. 5.9. Plumbing Systems 2. 5.10. Fire Protection 2. 5.11. Electrical System, Telephone & Security 2. 5.12. Lighting 2. 5.13. Fire Alarm & Life Safety 2. 5.14. Accessibility Review 2. 5.15. Environmental 3. 6 PHOTOGRAPHS 31 5.1 Site Features at Grade 3. 5.2 Roofing 3. a. Exterior Walls 3. 5.2 Roofing 3. 5.5 Interior Elements 4. 5.6 Specialties, Equipment and Special Construction 4. 5.9 Plumbing 5. <th>5</th> <th></th> <th></th> <th>11 11</th>	5			11 11
5.4. Structural Systems 1 5.5. Interior Elements 1 5.6. Specialties, Equipment and Special Construction 1 5.7. Vertical Transportation 2 5.8. Heating, Ventilation and Air Conditioning 2 5.9. Plumbing Systems 2 5.10. Fire Protection 2 5.11. Electrical System, Telephone & Security 2 5.12. Lighting 2 5.13. Fire Alarm & Life Safety 2 5.14. Accessibility Review 2 5.15. Environmental 3 6 PHOTOGRAPHS 31 5.1 Site Features at Grade 3 5.2 Roofing 3 a. Exterior Walls 3 5.2 Roofing 3 5.5 Interior Elements 4 5.6 Specialties, Equipment and Special Construction 4 5.9 Plumbing 5 5.10 Fire Protection 5				12
5.5. Interior Elements 1 5.6. Specialties, Equipment and Special Construction 1 5.7. Vertical Transportation 2 5.8. Heating, Ventilation and Air Conditioning 2 5.9. Plumbing Systems 2 5.10. Fire Protection 2 5.11. Electrical System, Telephone & Security 2 5.12. Lighting 2 5.13. Fire Alarm & Life Safety 2 5.14. Accessibility Review 2 5.15. Environmental 3 6 PHOTOGRAPHS 31 5.1 Site Features at Grade 3 5.2 Roofing 3 a. Exterior Walls 3 5.2 Roofing 3 5.5 Interior Elements 4 5.6 Specialties, Equipment and Special Construction 4 5.9 Plumbing 5 5.10 Fire Protection 5				14
5.6. Specialties, Equipment and Special Construction 1 5.7. Vertical Transportation 2 5.8. Heating, Ventilation and Air Conditioning 2 5.9. Plumbing Systems 2 5.10. Fire Protection 2 5.11. Electrical System, Telephone & Security 2 5.12. Lighting 2 5.13. Fire Alarm & Life Safety 2 5.14. Accessibility Review 2 5.15. Environmental 3 6 PHOTOGRAPHS 31 5.1 Site Features at Grade 3 5.2 Roofing 3 a. Exterior Walls 3 5.2 Roofing 3 5.5 Interior Elements 4 5.6 Specialties, Equipment and Special Construction 4 5.9 Plumbing 5 5.10 Fire Protection 5				16 17
5.7. Vertical Transportation 2 5.8. Heating, Ventilation and Air Conditioning 2 5.9. Plumbing Systems 2 5.10. Fire Protection 2 5.11. Electrical System, Telephone & Security 2 5.12. Lighting 2 5.13. Fire Alarm & Life Safety 2 5.14. Accessibility Review 2 5.15. Environmental 3 6 PHOTOGRAPHS 31 5.1 Site Features at Grade 3 5.2 Roofing 3 a. Exterior Walls 3 5.2 Roofing 3 5.5 Interior Elements 4 5.6 Specialties, Equipment and Special Construction 4 5.9 Plumbing 5 5.10 Fire Protection 5				18
5.9. Plumbing Systems 2 5.10. Fire Protection 2 5.11. Electrical System, Telephone & Security 2 5.12. Lighting 2 5.13. Fire Alarm & Life Safety 2 5.14. Accessibility Review 2 5.15. Environmental 3 6 PHOTOGRAPHS 31 5.1 Site Features at Grade 3 5.2 Roofing 3 a. Exterior Walls 3 5.2 Roofing 3 5.5 Interior Elements 4 5.6 Specialties, Equipment and Special Construction 4 5.9 Plumbing 5 5.10 Fire Protection 5		5.7. \	Vertical Transportation	20
5.10. Fire Protection 2 5.11. Electrical System, Telephone & Security 2 5.12. Lighting 2 5.13. Fire Alarm & Life Safety 2 5.14. Accessibility Review 2 5.15. Environmental 3 6 PHOTOGRAPHS 31 5.1 Site Features at Grade 3 5.2 Roofing 3 a. Exterior Walls 3 5.2 Roofing 3 5.5 Interior Elements 4 5.6 Specialties, Equipment and Special Construction 4 5.9 Plumbing 5 5.10 Fire Protection 5				21
5.11. Electrical System, Telephone & Security 2 5.12. Lighting 2 5.13. Fire Alarm & Life Safety 2 5.14. Accessibility Review 2 5.15. Environmental 3 6 PHOTOGRAPHS 31 5.1 Site Features at Grade 3 5.2 Roofing 3 a. Exterior Walls 3 5.2 Roofing 3 5.5 Interior Elements 4 5.6 Specialties, Equipment and Special Construction 4 5.9 Plumbing 5 5.10 Fire Protection 5				24 25
5.13. Fire Alarm & Life Safety 2 5.14. Accessibility Review 2 5.15. Environmental 3 6 PHOTOGRAPHS 31 5.1 Site Features at Grade 3 5.2 Roofing 3 a. Exterior Walls 3 5.2 Roofing 3 5.5 Interior Elements 4 5.6 Specialties, Equipment and Special Construction 4 5.9 HVAC 4 5.9 Plumbing 5 5.10 Fire Protection 5				26
5.14. Accessibility Review 2 5.15. Environmental 3 6 PHOTOGRAPHS 31 5.1 Site Features at Grade 3 5.2 Roofing 3 a. Exterior Walls 3 5.2 Roofing 3 5.5 Interior Elements 4 5.6 Specialties, Equipment and Special Construction 4 5.9 HVAC 4 5.9 Plumbing 5 5.10 Fire Protection 5				27
5.15. Environmental 3 6 PHOTOGRAPHS 31 5.1 Site Features at Grade 3 5.2 Roofing 3 a. Exterior Walls 3 5.2 Roofing 3 5.5 Interior Elements 4 5.6 Specialties, Equipment and Special Construction 4 5.9 HVAC 4 5.9 Plumbing 5 5.10 Fire Protection 5			•	28 29
5.1 Site Features at Grade 3 5.2 Roofing 3 a. Exterior Walls 3 5.2 Roofing 3 5.5 Interior Elements 4 5.6 Specialties, Equipment and Special Construction 4 5.9 HVAC 4 5.9 Plumbing 5 5.10 Fire Protection 5				30
5.1 Site Features at Grade 3 5.2 Roofing 3 a. Exterior Walls 3 5.2 Roofing 3 5.5 Interior Elements 4 5.6 Specialties, Equipment and Special Construction 4 5.9 HVAC 4 5.9 Plumbing 5 5.10 Fire Protection 5	6	РНОТО	GRAPHS	31
 a. Exterior Walls 5.2 Roofing 5.5 Interior Elements 5.6 Specialties, Equipment and Special Construction 5.9 HVAC 5.9 Plumbing 5.10 Fire Protection 		5.1 Site Fe	eatures at Grade	31
5.2 Roofing 5.5 Interior Elements 5.6 Specialties, Equipment and Special Construction 5.9 HVAC 5.9 Plumbing 5.10 Fire Protection 5			•	33 35
5.5 Interior Elements 5.6 Specialties, Equipment and Special Construction 5.9 HVAC 5.9 Plumbing 5.10 Fire Protection 5.5 Interior Elements 4 5.6 Specialties, Equipment and Special Construction 5.7 Specialties, Equipment and Special Construction 5.8 Specialties, Equipment and Special Construction 5.9 Fire Protection 5.0 Specialties, Equipment and Special Construction 5.0 Specialties, Equipment and Special Construction 5.0 Fire Protection 5.10 Fire Protection				37
5.9 HVAC 5.9 Plumbing 5.10 Fire Protection 5.9 Fire Protection		5.5 Interio	or Elements	40
5.9 Plumbing 5.10 Fire Protection				43
5.10 Fire Protection 5				47 53
5.11 Electrical System 5		5.10 Fire I	Protection	54
·			· · · · · · · · · · · · · · · · · · ·	56
				59 60
7 LIMITING CONDITIONS 63	7		•	

1 EXECUTIVE SUMMARY

1.1 Building Description

Originally constructed in 1988, the Sheffield Elementary School Building located at 43 Crocker Ave (the "Property") is a two (2) story building containing a total area of +/- 42,000 sq. ft. The Elementary School Building is attached to and part of a three-building complex which includes an Administration Building and a Gymnasium and Auditorium building. Certain systems that are part of the Elementary School Building are shared with the Administration and the Gymnasium/Auditorium buildings.

The Property is situated on two combined parcels of land which comprise 5.19 acres (+/-226,076 sq. ft.) in aggregate. The Sheffield Elementary School Building is bounded to the north by Crocker Avenue, to the east by the Gymnasium/Auditorium and Administration Buildings with single family residences and Davis Street beyond, to the south by Keith Street a paper street, and to the west by athletic fields and Montague Street beyond. The site is generally level.

1.2 Condition

In general, based on our visual observations, interviews and research, the building appears to be in GOOD condition. Visual observation and research conducted indicate that the Property is generally well maintained.

The Property has one main roof above the second floor with a second lower roof above the first floor cafeteria, kitchen and mechanical room areas. The roofs are a white thermoplastic polyolefin ("TPO") roof membrane on-site personnel state that they do not know the exact age of the roof, but that it was over ten (10) years old. It appears similar in material and condition to the Administration Building which was installed in 2010. With the building originally constructed in 1998 the original roof would have been 20 years old in 2008. It seems reasonable that the existing TPO roof was installed between 2008-2010. The field and perimeter edge of the main roofs appeared to be in good condition.

The façade of the Property consists of brick with a precast concrete cornice, decorative bands of soldier course brick at the window heads and precast concrete window sills. The façade was observed to be in good condition with limited cracking or spalling brick. The mortar joints between the brick was observed to be in good condition.

The windows are aluminum clade wood sash units with double glazed thermal pane glazing and appeared in good condition. The exterior of the windows and the brick molding surrounding the windows was observed to be in fair condition.

The Property is heated by two (2) Weil McLain steam boilers. Boiler #1 is dual fuel with both natural gas and oil capability which is rated at 2,452 MBH and Boiler #2 is an oil-fired unit rated at 2,000 MBH. On site staff report that Boiler #1 was replaced in 1992 and Boiler #2 was replaced in 2014. Steam for heating is provided the Gymnasium/Auditorium building while the Elementary School is heated with hot water generated via a steam to hot water heat exchanger that feeds unit ventilators, convectors and baseboard radiators. The Library and Kitchen are equipped with individual Reznor outside air units with gas fired heat. The Cafeteria and Offices are provided with cooling by a single Carrier rooftop DX air conditioner. The heating and cooling systems appeared to be in good condition.

Domestic water service is provided to the building by street pressure from the Town of Montague via a three inch (3") incoming water service located in the Sprinkler Room on the first floor. The incoming water service is equipped with a backflow preventor.

Domestic hot water for the is provided by two (2) of two 80 gallon gas fired hot water heaters manufactured by HTP and installed in 2017.

The electrical service is one of the shared systems at the Property. Electrical service is provided by the utility company, Eversource via an exterior surface mounted transformer located at the southwest corner of the site adjacent to the building. The utility company transformer feeds the main switchboard which is a 1,200 amp, 208Y/120 volt, three phase, 4 wire switchboard manufactured by Siemens.

The Property has a single (1) two stop hydraulic elevator manufactured by Dover Elevator which serves both levels. The elevator was observed to be in good condition and was installed in 1988.

The Property is equipped with a fire protection (sprinkler) system. A four inch (4") incoming fire service located in the first floor sprinkler control room is equipped with a backflow preventor and operates off street pressure from the municipal water service. Fire extinguishers are located throughout the occupied spaces.

The Sheffield Elementary School has a Silent Knight SK-5208 fire alarm system manufactured by Honeywell which is located in the boiler room. The fire alarm system is not fully addressable, and the Elementary School Building is broken into five (5) zones by the annunciator panel. The fire alarm system is shared with the Administration Building and the Gymnasium/Auditorium Building.

The Property is generally handicapped accessible with accessible entrances at the parking lot and at the main entrance, an elevator to provide vertical transportation and generally accessible restrooms. There were minor noted issues including cross slope on the sidewalk to the side entrance from the parking lot and miscellaneous issues with mounting heights and locations for toilet accessories and hardware.

The major capital items identified in the report relate to repair and replacement of exterior features at grade including paving of driveways and parking lots as well as repairs to the exterior façade and replacement of the roof and other major during the fifteen (15) year evaluation period. Anticipated capital and repair costs are summarized in Section 1.3.

1.3 Summary of Costs

Costs associated with the correction of present observed issues, deficiencies, deferred maintenance and component and systems replacements are as follows (in thousands of dollars):

-	mary of Costs by Building S																			
			_							Cost per	r Year (\$	1,000's)								
Buil	ding System Summary	Immediate	2021	2022	2023	2024	202	20:	26 20	027	2028	2029	2030	203	1 20	032	2033	2034	2035	Total
5.1	Site & Features at Grade	\$0.	.0 \$1	7 \$18.	2 \$24	.6 5	50.0	\$0.0	\$0.0	\$0.0	\$222.9	\$0.	0 S	0.0	\$0.0	\$0.0	\$18.2	\$0.0	\$0.0	\$285
5.2	Roofing	\$0.						\$0.0	\$0.0	\$0.0	\$0.0	\$0.	_	0.0	\$0.0	\$0.0	\$907.5	_	_	
5.3	Exterior Walls	\$0.		1 \$129.				\$0.0	\$0.0	\$0.0	\$0.0	\$0.	0 \$	0.0	\$0.0	\$0.0	\$0.0			
5.4	Structural Systems	\$0.						\$0.0	\$0.0	\$0.0	\$0.0	\$0.	_	0.0	\$0.0	\$0.0	\$0.0	_	_	_
5.5	Interior Elements	\$0.						\$0.7		\$74.4	\$74.3	\$0.			\$0.0	\$0.0	\$0.0		_	
5.6 5.7	Specialties, Equipment, etc. Vertical Transportation	\$0. \$0.						\$0.3 21.0	\$0.3 \$0.0	\$1.4 \$0.0	\$0.3 \$0.0	\$0. \$0.		3.4 \$ 0.0	\$0.0	\$0.3 \$0.0	\$11.8 \$0.0			
5.8	HVAC	\$0.						\$9.9	\$1.7	\$1.7	\$3.9	\$1.		5.5	\$1.7	\$2.5	\$1.7	_		
5.9	Plumbing	\$0.						\$0.8	\$0.0	\$0.3	\$0.0	\$5.		1.1	\$0.0	\$0.0	\$0.3	_	_	_
5.10	Fire Protection	\$0.	.0 \$1	4 \$1.	1 \$1	.1 \$	51.4	\$1.1	\$1.1	\$1.4	\$1.1	\$1.	1 \$	1.4	\$1.1	\$1.1	\$1.4	\$1.1	\$1.1	\$17
	Electrical System, Telephone	\$0.						\$2.8	\$0.0	\$8.3	\$0.0	\$2.		5.5	\$2.8	\$0.0	\$8.3			
	Lighting	\$0.						\$0.0	\$0.0	\$0.0	\$0.0	\$0.		0.0	\$0.0	\$0.0	\$0.0		_	
	Fire Alarm & Life Safety	\$0.						\$0.0	\$2.2	\$33.0	\$0.0	\$2.		0.0	\$0.0	\$2.2	\$0.0			
	Accessibility Environmental, IAQ	\$0. \$0.			_			\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0. \$0.	_	0.0 0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0			
3.13	LEED	30.	.0 30.	0 50.	50	.0 ,	50.0	Ş0.0	30.0	Ş0.0	30.0	,JU.	ر ۶	0.0	50.0	30.0	30.0	50.0	, 50.0	, 30.
Shof	TOTAL field Elementary School - 43	\$0.			\$87	.5 \$1	0.2 \$1	36.6	\$5.2 \$	120.3	\$302.3	\$13.	5 \$22	5.8	16.8	\$6.1	\$949.1	\$7.7	\$44.4	\$2,250.
	mary of Costs by Building Sy			ac, IVIA																
	en Out By R&M and CE		,																	
								SUMMA	RY OF CO	ST BY YEA	AR FOR I	REPAIR &	MAINTEN	ANCE				1		
										Cost per	Year (\$1	,000's)								
Build	ding System Summary	Immediate	2021	2021	2022	2023	2024	2025	2026	2027	20)28	2029	2030	2031	2032	2	033	2034	Total
										-	_									
5.1	Site & Features at Grade	\$0.0	\$1.5	\$0.0	\$6.0	\$0.0	\$0.0	\$0.0	\$0	0 6	0.0	\$0.0	\$0.0	\$0.0	\$0.0	1	\$1.3	\$0.0	\$0.0	\$8.8
	Roofing	\$0.0	\$0.0	\$2.5	\$0.0	\$0.0	\$0.0	\$0.0			0.0	\$0.0	\$0.0	\$0.0	\$0.0		\$0.0	\$0.0	\$0.0	\$2.5
	Exterior Walls	\$0.0	\$1.9	\$0.0	\$1.5	\$0.0	\$0.0	\$0.0			0.0	\$0.0	\$0.0	\$0.0	\$0.0		\$0.0	\$0.0	\$0.0	\$3.4
5.4	Structural Systems	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0	.0 \$	0.0	\$0.0	\$0.0	\$0.0	\$0.0	0	\$0.0	\$0.0	\$0.0	\$0.0
5.5	Interior Elements	\$0.0	\$0.8	\$10.0	\$2.8	\$0.0	\$0.7	\$0.0	\$0	.0 \$	0.0	\$0.0	\$0.7	\$0.0	\$0.0	0	\$0.0	\$0.0	\$0.7	\$15.
	Specialties, Equipment, etc.	\$0.0	\$3.8	\$6.8	\$0.3	\$0.8	\$0.3	\$0.3			0.3	\$0.3	\$5.8	\$0.3	\$0.3		\$0.3	\$3.8	\$0.3	\$23.
	Vertical Transportation	\$0.0	\$0.4	\$0.0	\$0.0	\$0.0	\$0.0 \$9.0	\$0.0			0.0	\$0.0	\$0.0	\$0.0	\$0.0		\$0.0	\$0.0	\$0.0	\$0.4 \$47.9
	HVAC Plumbing	\$0.0 \$0.0	\$1.8 \$1.5	\$1.5 \$0.0	\$1.5 \$0.0	\$1.5 \$0.3	\$0.8	\$1.5 \$0.0			3.5 0.0	\$1.5 \$5.0	\$13.2 \$1.0	\$1.5 \$0.0	\$2.3 \$0.0		\$1.5 \$0.3	\$2.3 \$0.0	\$4.0 \$0.0	\$47.5
	Fire Protection	\$0.0	\$1.4	\$1.1	\$1.1	\$1.4	\$1.1	\$1.1			1.1	\$1.1	\$1.4	\$1.1	\$1.1		\$1.4	\$1.1	\$1.1	\$17.
5.11	Electrical System, Telephone	\$0.0	\$7.2	\$0.0	\$0.0	\$5.5	\$2.8	\$0.0	\$8.	.3 \$	0.0	\$2.8	\$5.5	\$2.8	\$0.0	0	\$8.3	\$0.0	\$2.8	\$45.
	Lighting	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0			0.0	\$0.0	\$0.0	\$0.0	\$0.0		\$0.0	\$0.0	\$0.0	\$0.0
	Fire Alarm & Life Safety	\$0.0	\$15.5	\$0.0	\$2.0	\$0.0	\$0.0	\$2.0			0.0	\$2.0	\$0.0	\$0.0	\$2.0		\$0.0	\$0.0	\$2.0	\$25.5
	Accessibility Environmental, IAQ	\$0.0 \$0.0	\$9.1 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0			0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0		\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$9.1 \$0.0
	LEED LEED	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	J 30.	.0 \$	50.0	\$0.0	\$0.0	\$0.0	\$0.0		\$0.0	\$0.0	\$0.0	\$0.0
	TOTAL	\$0.0	\$44.7	\$21.9	\$15.1	\$9.4	\$14.5	\$4.9	\$12.	1 \$	4.9	\$12.6	\$27.4	\$5.6	\$5.6	5 \$	12.9	\$7.1	\$10.8	\$209.3
								SUMMA	ARY OF CO	ST BY YE	AR FOR	CAPITAL	EXPENDI"	TURE						
										Cost per	Year (\$1	000's)								
Build	ding System Summary	Immediate	2021	2021	2022	2023	2024	2025	2026	2027			2029	2030	2031	2032	. 2	033	2034	Total
		1				-	$-\overline{1}$			+=			$-\top$			-				
5.1	Site & Features at Grade	\$0.0	\$0.2	\$18.2	\$18.6	\$0.0	\$0.0	\$0.0	\$0	.0 \$22	2.9	\$0.0	\$0.0	\$0.0	\$0.0	\$	17.0	\$0.0	\$0.0	\$276.
5.2	Roofing	\$0.0	\$16.2	\$0.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0	.0 \$	0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$9	07.5	\$0.0	\$0.0	\$923.
	Exterior Walls	\$0.0	\$0.2	\$129.1	\$0.2	\$0.0	\$0.0	\$0.0			0.0	\$0.0	\$0.0	\$0.0	\$0.0		\$0.0	\$0.0	\$0.0	\$129.
	Structural Systems Interior Elements	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0			0.0	\$0.0	\$0.0	\$0.0	\$0.0		\$0.0	\$0.0	\$0.0	\$0.
	Specialties, Equipment, etc.	\$0.0 \$0.0	\$0.1 \$0.9	\$1.0 \$22.7	\$53.2 \$0.0	\$0.0 \$0.6	\$0.1 \$0.0	\$0.0 \$0.0			4.3 0.0	\$0.0 \$0.0	\$168.4 \$17.6	\$0.0 \$11.0	\$0.0 \$0.0		\$0.0 11.6	\$0.0 \$0.4	\$0.1 \$0.0	\$371.5 \$65.6
	Vertical Transportation	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$121.0	\$0.0			0.0	\$0.0	\$0.0	\$0.0	\$0.0		\$0.0	\$0.4	\$0.0	\$121.
	HVAC	\$0.0	\$0.2	\$16.7	\$0.2	\$0.2	\$0.9	\$0.2	\$0	.2 \$	0.4	\$0.2	\$12.3	\$0.2	\$0.2	2	\$0.2	\$0.2	\$0.4	\$32.
	Plumbing	\$0.0	\$0.2	\$0.0	\$0.0	\$0.0	\$0.1	\$0.0			0.0	\$0.5	\$0.1	\$0.0	\$0.0		\$0.0	\$0.0	\$33.0	\$33.
	Fire Protection Electrical System, Telephone	\$0.0	\$0.0 \$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0			0.0	\$0.0	\$0.0	\$0.0	\$0.0		\$0.0	\$0.0	\$0.0	\$0.
	Lighting	\$0.0 \$0.0	\$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0			0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0		\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0. \$0.
	Fire Alarm & Life Safety	\$0.0	\$19.7	\$18.2	\$0.0	\$0.0	\$0.0	\$0.2			0.0	\$0.0	\$0.0	\$0.0	\$0.2		\$0.0	\$0.0	\$0.0	\$71.
5.14	Accessibility	\$0.0	\$14.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0			0.0	\$0.0	\$0.0	\$0.0	\$0.0		\$0.0	\$0.0	\$0.0	\$14.
	Environmental, IAQ	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0	.0 \$	0.0	\$0.0	\$0.0	\$0.0	\$0.0	0	\$0.0	\$0.0	\$0.0	\$0.
	LEED			_						-	-	_				-				
	TOTAL	\$0.0	\$52.2	\$206.1	\$72.4	\$0.8	\$122.1	\$0.4	\$108.	2 \$29	7.5	\$0.9	\$198.4	\$11.2	\$0.5	\$ ¢0	36.2	\$0.6	\$33.7	\$2,041.0

2 PROJECT INFORMATION

Building Name: Sheffield Elementary School Building

Building Location: 43 Crocker Avenue, Turners Falls, MA

Building Type: Elementary School

Building Area: +/- 42,000 square feet

Building Height: 2 Stories

Site Area: 5.19 acres (+/-226,076 sq. ft.)

Parking: 92 surface parking spaces

Year Built: 1988

Age: Thirty-Two (32) years

Present Owner: Town of Montague

Building Manager: Joanne Blier

This PCA Carried Out for: Gill Montague Regional School District

35 Crocker Avenue Montague, MA

Date of Site Visit: July 30 & 31, 2020

Weather During Site Visit: Sunny, Clear, 70 degrees F

Report Date: October 5, 2020

Site Visit Conducted By: Gregory J. Walsh

Brian P. Laroche

Personnel at Site: Heath Cummings – Director of Facilities

Municipality of Jurisdiction: Montague, MA

Applicable Building Codes: Massachusetts State Building Code 9th Edition

Existing Building Code (IEBC 2015)

Massachusetts Comprehensive Fire Safety Code, 527 CMR 1.0
Massachusetts Architectural Access Board Regulations 521 CMR
Americans with Disabilities Act 2010 Standards for Accessible Design

National Fire Protection Association (as referenced by 780 CMR and 527 CMR)

3 OBJECTIVE

3.1. Objective

The objective of this Property Condition Assessment (APCA) is to assess the general condition of the property and document obvious problems or visible defects based on visual observations, review of available documentation and discussions with property management. The building components and systems assessed include pavement and site improvements, building envelope, mechanical and electrical plumbing, fire protection and alarm systems.

The following is an abbreviated form of the standard Property Condition Assessment ("PCA") report which would contain significantly more detailed information on all of the building systems resulting from a more complete assessment as performed by licensed engineers and consultants specializing in each of the specific disciplines. This report is a summary of observations by a Potomac Capital Advisors, Inc. representative and does not strictly conform to the requirements of ASTM – E2018-99 (Standard Guide for Property Condition Assessment Procedures).

Regardless of its scope, an APCA cannot completely eliminate the potential for physical deficiencies or predict the performance of the Property's systems. This survey was conducted as a visual walk through of the property and did not include any testing or destructive testing of the building or any systems. As such it is not the intent of this survey to uncover every defect in the property, and this report will serve to reduce, but not eliminate uncertainty with regard to potential deficiencies

THIS REPORT IS THE PROPERTY OF POTOMAC CAPITAL ADVISORS, INC. AND THE GILL MONTAGUE REGIONAL SCHOOL DISTRICT, AND WAS PREPARED FOR A SPECIFIC USE AND PURPOSE. THIS REPORT MAY NOT BE USED OR RELIED UPON BY ANY OTHER PARTY WITHOUT THE EXPRESSED WRITTEN PERMISSION OF POTOMAC CAPITAL ADVISORS, INC. AND THERE SHALL BE NO THIRD PARTY BENEFICIARIES, INTENDED OR IMPLIED UNLESS SPECIFICALLY IDENTIFIED HEREIN.

3.2. Scope of Report

To accomplish the APCA objectives, the Scope of Work includes the following tasks:

- Review of available documentation such as construction documents, base building certificate of occupancy, reports of building code violations or previous PCA reports;
- 2. Interviews with property management or maintenance personnel knowledgeable of the physical characteristics, maintenance and repair of the property;
- A Walk-Through Survey of the property to visually observe the property so as to obtain information on material systems and components for the purpose of providing a brief description, identifying physical deficiencies to the extent that they are observable, and for obtaining information needed to develop the Property Condition Assessment;
- 4. Preparation of Opinions of Probable Costs to Remedy observed physical deficiencies; and,
- 5. Preparation of the Property Condition Assessment documenting the findings and results of the preceding tasks.
- 6. No measurements or counts of systems, components, floor areas, rooms, etc. or calculations were prepared
- A survey for the presence of mold or fungus, or to opine on indoor are quality is explicitly excluded.

4 METHODOLOGY

4.1. Guide Specification

In general, this is an abbreviated for of Property Condition Assessment. This is the standard form that PCA360 uses for reports of this type, while this form generally follows the ASTM guidelines it does not strictly conform to ASTM E 2018-99 standards for PCA reporting.

4.2. Documentation Review

Any documentation provided by the Owner or on-site personnel which was available was reviewed if it would augment the walk-through survey and assist the assessor in understanding the subject project and identifying physical deficiencies. Such documentation is generally limited to construction drawings, specification, base building Certificate of Occupancy and recorded code violations. Other documents thought to be helpful, if available, may have been reviewed. Documents reviewed are listed in Section 2.0 of this report.

4.3. Interviews

On site interviews with property management or maintenance personnel familiar with the building were conducted to develop an understanding of the maintenance and service information and history of the building. Any documentation provided by those individuals was reviewed and the information included in this report. The names of those interviewed, documents reviewed, and applicable codes are listed in Section 2.0 of this report.

4.4. Walk-Through Survey

A visit to the property was conducted to visually observe the property of obtain information on material systems and components for the purposes of providing a brief description, identifying physical deficiencies to the extent that they are observable, and obtaining information needed to address such issues in the Property Condition Assessment. This investigation was strictly a visual inspection of the property and building systems and explicitly excludes any operation, testing or destructive testing of the building or any systems.

A Property Condition Assessment of this type cannot eliminate the uncertainty regarding the presence of, or potential for physical deficiencies or predict the continued performance of the Property's systems. The preparation of a PCA is not intended to uncover every defect in the Property and may reduce, but will not eliminate, the uncertainty regarding the potential for component or system failure.

A Registered Architect has observed the pavement, exterior walls, roofing, mechanical, electrical systems and has reviewed generally the building for requirements of the Americans with Disabilities Act. In addition, components and systems have been evaluated for their expected useful life and effective age, with replacement recommendations noted for those systems or components that will reach the end of their remaining useful life during the analysis term.

Physical deficiencies identified as significant are deemed to be present if they represent either of the following:

- The physical deficiency represents a cited or apparent code violation, an immediate life safety or health hazard to the occupants or users of the property, or a fire safety hazard to the property itself, or;
- 2. The physical deficiency, if left uncorrected, could result in accelerating deterioration of the system in question and significantly increase the cost to correct.

Other physical deficiencies of a lesser nature and/or items of deferred maintenance have also been observed and noted for inclusion in aggregate cost estimate.

Other observations consist of one or a combination of the following activities:

- Walk- through observations on a complete or sample basis to determine the overall condition of the property;
- 2. Observation of a representative sample of improvements, building, equipment and fixtures and systems to determine serviceability and operating characteristics;
- 3. Non- invasive and detailed observations to determine representative conditions;
- 4. Recording of physical deficiencies; and
- 5. Photos taken of building exteriors, roofs, site features and common areas, sufficient to give a general idea of the character and condition of the building, where it would help illustrate various points to the reader, specific deficiencies have also been photographed.

4.5. Opinion of Probable Costs

Based upon our observations during our site visit, as well as information gathered from the Documentation Review and Interviews, we have prepared a list of recommended repairs to address present observed physical deficiencies, along with general scope and preliminary budget cost estimates for these repairs. These estimates are for components or systems exhibiting patent or significant deferred maintenance requiring major repairs or replacement. Repairs or replacements that could be classified as cosmetic, decorative, part or parcel of a building renovation program, normal preventative maintenance, or that are the responsibility of tenants, were not included.

These preliminary budget cost estimates were prioritized as follows:

Immediate (I):

Expenditures that require immediate action as a result of existing or potentially unsafe conditions, building code violations, poor or deteriorated condition of critical element or system, or a condition that if left "as is" with an extensive delay in correction, would result in or contribute to critical element or system failure within one year or would lead to significantly escalated repair costs.

Years 1 though n (1,2,3 etc.):

Deficiencies which may not warrant immediate attention, but which require repairs or replacements that should be undertaken on a priority basis taking precedence over routine preventative maintenance. Deferred maintenance or deficiency resulting from improper design, installation and/or quality of original material or systems. Repairs that fall into the category of an ongoing maintenance/replacement problem, components or systems that have realized or exceeded their expected useful life.

In general, where multiple years are shown on a line item, the total line item cost will be recognized in full for each of the years shown, as a repeated project/ cost.

Accessibility Compliance:

Expenditures that need to be incorporated into a plan for bringing the building into compliance with the Americans with Disabilities Act and the City of New York Local Law 58 accessibility requirements.

In addition, the budget items were categorized as follows:

Repair & Maintenance RM Capital Expenditures CE

Cost information used is generally obtained from consultants and our recent experience with projects that are similar, where applicable industry recognized databases, such as R.S. Means, F. W. Dodge or similar are consulted. Where appropriate, Potomac Capital Advisors, Inc. and its consultants use their own database of construction cost information or obtains cost information from contractors.

Estimated costs are preliminary and require refinement. They are not to be construed as final nor are the work scopes provided necessarily all-inclusive. Such costs and work scopes are "order of magnitude", and are to be used to assist the reader in the overall assessment of the property.

These costs are also net of construction management fees, design fees and contingency budget. Final and actual costs may vary depending on such matters as material, equipment or system selected, field conditions and unknowns. Materials or procedures recommended in this report are suggestions only and need to be researched further and refined. In order to obtain the best prices, we recommend that competitive bids be secured. Budgeting for contingencies is advised.

5 DESCRIPTIONS & OBSERVATIONS

5.1. Site & Features at Grade

Description

The Property is situated on two combined parcels of land which comprise 5.19 acres (+/-226,076 sq. ft.) in aggregate. The Sheffield Elementary School Building is bounded to the north by Crocker Avenue, to the east by the Gymnasium/Auditorium and Administration Buildings with single family residences and Davis Street beyond, to the south by Keith Street a paper street, and to the west by athletic fields and Montague Street beyond. The site is generally level.

The site is well landscaped with mature vegetation and trees. Site stormwater drains by sheet action to vegetated areas.

Features at grade consist of cast in place concrete sidewalks at the perimeter street edge of the Property and leading to the main entrances as well a bituminous driveway to the side (west) and rear (south). The Property also has a bituminous basketball court and a bituminous paved parking lot which accommodates 92 cars.

Observations/Comments

In general, the site and features at grade are in fair condition consistent with their expected age. The existing cast in place concrete sidewalks are generally in good condition with some limited areas that have either settled or cracked.

The bituminous driveway at the side (west) and rear (south) is in fair to poor condition, with heavy cracking apparent throughout and several large areas where the finish course has delaminated exposing the base course and other areas where there are deep pot holes that extend through the base course.

The basketball court appeared to be in fair condition with some significant cracks where grass has begun to grow. The parking lot was observed to be in good condition with some cracks but generally cmooth and intact.

Recommendations

The majority of the cast in place concrete sidewalks are in good condition. Cast in place concrete paving has an expected useful life ("EUL") of 30 years. While there is currently limited evidence of settlement and cracking, it is anticipated that limited sections of the concrete sidewalks will require replacement during the evaluation period due to further settlement and cracking.

Bituminous paving has an expected useful life ("EUL") of 25 years. The areas of bituminous paving vary in their condition, however the paving is approximately thrity-two (32) years old.

The parking lot is generally in good condition. It is recommended that the parking lot have all cracks sealed and be sealcoated to extend the useful life of the paving.

The basketball court is in fair condition with somewhat more significant cracking than the parking lot. It is recommended that the parking lot have all cracks sealed and be sealcoated to extend the useful life of the paving.

The bituminous paving at the driveways is in fair to poor condition, with advanced deterioration of the finish course and areas with deeper potholes that extend into the underlying base course. There is grass growing at the edges of the pavement and in the field as well as visual evidence of damage from frost heaves. These conditions are contributing to the accelerating failure of the paving. The driveways will need to be repaved early in the evaluation period

While the useful life of the basketball court will be extended by sealing the cracks and sealcoating, it is anticipated that it will need to be repaved at the midpoint of the evaluation period.

Similarly, the useful life of the parking lot will be extended by sealing the cracks and sealcoating, it is anticipated that it will need to be repayed at the midpoint of the evaluation period.

To properly maintain and extend the useful life of the basketball court and parking lot paving, it is recommended that crack sealing and sealcoating be performed at the end of the evaluation period.

There are two trees in the front lawn of the elementary school which were observed to be in poor condition and/or diseased. It is recommended that these trees be removed.

Observed issues, recommended corrections, estimated costs to correct and priority are as follows:

5.1	Site & Features at Grade						
Obs	servation/Issue/Recommended Correction	1	Estimat	ed Cost, Cate	egory and Year		
	Item	<u>Qty</u>	<u>Unit</u>	Unit Cost	Total Cost	Cat	<u>Year</u>
1.	Repairs to cracked, spalled and settled cast in place concrete sidewalks	600	SF	\$10	\$6,000	RM	3
2.	Repair cracks and seal coat parking lot	51000	SF	\$0.30	\$15,300	CE	2
3.	Repair cracks and seal coat basketball court	4200	SF	\$0.30	\$1,260		2
4.	Patch potholes and damaged areas of bituminous paving at drives	8200	SF	\$2	\$16,400	CE	3
5.	Repave bituminous drive at rear of school	8200	SF	\$4	\$32,800	CE	8
6.	Mill and repave bituminous parking lot	51000	SF	\$3	\$153,000	CE	8
7.	Repave basketball court	4200	SF	\$4	\$16,800	CE	8
8.	Repair cracks and seal coat parking lot	51000	SF	\$0.30	\$15,300	CE	13
9.	Repair cracks and seal coat basketball court	4200	SF	\$0.30	\$1,260	RM	13
10.	Remove two dead/rotted trees	1	LS	\$1,500	\$1,500	RM	1
11.	Contingency		10.0%		\$25,962	CE	
Tot	 al				\$285,582		

5.2. Roofing

Description

The Property has one main roof above the second floor with a second lower roof above the first floor cafeteria, kitchen and mechanical room areas. The roofs are a white thermoplastic polyolefin ("TPO") roof membrane on-site personnel state that they donot knowthe exact age of the roof, but that it was over ten (10) years old. It appears similar in material and condition to the Administration Building which was installed in 2010. With the building originally constructed in 1998 the original roof would have been 20 years old in 2008. It seems reasonable that the existing TPO roof was installed between 2008-2010. Storm water at the roofs drain to interior storm drain lines connected to the municipal stormwater system.

Observations/Comments

The field and perimeter edge of the main roofs appeared to be in good condition. There are numerous rising wall condition where the roof system is flashed to the rising wall with termination bar and caulking as opposed to a through wall counterflashing. This type of detail, although common, is not as resistant to failure as a counterflashing. As a result these termination require regular, aggressive maintenance.

Recommendations

It is recommended that that an annual program of roof maintenance be implemented to ensure that the roof remains watertight. The cost of this program has already been accounted for in the budget of the Sheffield Administration Building.

Inspect all perimeter terminations at rising walls (term bar) and recaulk as required to ensure terminations are water tight.

Flashing and terminations at roof penetrations, rooftop equipment, curbs, hatches and chimneys were observed to be in fair condition. These conditions should be inspected and recaulked as neeted at the beginning of the evaluation term.

Some of the existing termination details at rising walls, particularly at the connection to the gymnasium/auditorium building appear to be inferior in design and execution. An allowance to inspect and modify these termination is provided in the beginning of the evaluation term.

In the center of the field of the roof on the west wing, at the southernmost end there is a an area where an asphalt based roofing material was applied to the TPO membrane. This material has had a chemical reaction with the surface of the TPO resulting in the liquification of the TPO membrane. This condition should be repaired immediately to avoid further deterioration of the roof membrane.

The roof access ladders at the mechanical room do not have OSHA compliant fall protection. It is recommended that all roof access ladders be replaced with compliant fall protection at the beginning of the evaluation term.

Access from the low roof to the high roof was achieved vai the use of an extension ladder. It is recommended that OSHA compliant access ladders be provided at significant changes in roof elevation duringn the beginning of the evaluation term.

The main roof membrane is estimated to be twelve (12) years old. Thermoplastic Polyolefin roof systems have an expected useful life ("EUL") of 20-25 years based on maintenance and environment. It is anticipated that he roof will need to be replaced during the midpoint of the evaluation term.

It is further recommended that that an annual program of roof maintenance be implemented to ensure that the roof remains watertight.

There are two large sheet metal caps on ventilation shafts. The caps appear to be original (1925) and were observed to be in good condition. These caps should be periodically maintained and painted to avoid corrosion.

At the roof access hatch, there is a safety railing which is manufactured from fiberglass. The exterior coating on the fiberglass rails has eroded from weather and UV exposure resulting in exposed raw fiberglass which easily effects exposed skin. It is recommended that this rail system be replaced with a new aluminum railing system.

At the end of the evaluation period, the roofs will be twenty-five (25) years old. Thermoplastic Polyolefin roof systems have an expected useful life ("EUL") of 20-25 years based on maintenance and environment. It was observed that the fabric reinforcement is visible through the top side of the roof membrane which indicates advanced surface wear of the roof membrane. It is anticipated that the roof will require replacement at the end of the evaluation term.

The main entrance portico was observed to have water damaged and/or deteriorated wood fascia and trim. The fascia and trim should be repaired and the roof replaced in the near term.

Observed issues, recommended corrections, estimated costs to correct and priority are as follows:

5.2	Roofing						
Obs	servation/Issue/Recommended Correction		Estimate	ed Cost, Cate	egory and Year		
	Item	<u>Qty</u>	<u>Unit</u>	Unit Cost	Total Cost	Cat	Year
	Allowance for roof inspection and repairs - Included in Administration						
1.	Bldg. Inspect and recaulk all perimeter terminations (term bar) at all rising				\$0		
2.	wall conditions	300	LF	\$10	\$3,000	CE	1
3.	Inspect and recaulk/repair all terminations, fasteners and power connections at all rooftop equipment curbs and hatches	1	LS	\$1,000	\$1,000		1
	Allowance to rework failed roofing terminations at rising walls and roof edge transitions	1	LS	\$5,000	\$5,000		1
5.	Repair roof damage at west end of classroom wing where incompatible sealants were applied	1	LS	\$300	\$300		1
6.	Install code compliant roof access ladders to roof and at roof hatch (fall protection)	3	EA	\$1,200	\$3,600		1
	Install code compliant roof access ladders between roof elevation changes	1	EA	\$1,800	\$1,800		1
	Replace Elementary School Roofs (Inc. Design & PM)	25000	SF	\$33	\$825,000		13
9.	Repair damaged fascia and trim at front entry portico and replace roof	1	LS	\$2,500	\$2,500		2
11.	Contingency		10.0%		\$84,220	CE	
Tot	tal				\$926,420		

5.3. Exterior Walls

Description

Exterior walls were observed at grade. The inspection did not include performing up close visual inspection using an aerial lift or swing stage. The façade of the Property consists of brick with a precast concrete cornice, decorative bands of soldier course brick at the wondow heads and precast concrete window sills. The façade was observed to be in good condition with limited cracking or spalling brick. The mortar joints between the brick was observed to be in good condition.

The windows are aluminum clade wood sash units with double glazed thermal pane glazing and appeared in good condition. Exterior doors are typically steel with double pane vision windows.

Observations/Comments

The exterior walls were viewed from grade. It was observed that the brick and precast façade was in poor condition with significant distress. Generally, the mortar joints throughout were deeply receded and the mortar was soft. There were numerous areas where mortar was observed to be missing both at the brick as well as at joints between precast elements. There was extensive cracking, spalling and dislocation of the precast stones at the decorative band above the watertable. From the ground, it was observed that there were several cracks and spalls in the precast cornice stones. Several precast sills had cracks and spalls and in some locations the reinforcing steel was exposed.

The steel lintels above doors and windows were observed to be rusting and there was limited evidence of rust jacking at the lintels. Rust jacking occurs when metal oxidizes as a result of the process of rusting which results in the expansion of the metal which can dislocate adjacent masonry.

The wood casing and brick molding at window and door openings was observed to be in fair to poor condition. The paint was peeling and in isolated locations the wood trim appeared weathered or possibly rotted. At the interior, several windows were observed where the sash counterweights and cords were missing or dislodged.

Recommendations

The exterior façade of the building was observed to be in poor condition. It is recommended that an exterior façade consultant be engaged to perform an inspection of the façade and to prepare restoration plans and specifications.

As previously described, there are numerous significant issues with the masonry façade including cracked, spalled and displaced decorative precast stones at the band above the watertable and at the cornice and coping stones below the roof. The mortar joints throughout between brick, precast stones and between brick and precast is in poor condition with deeply receded and soft mortar or missing mortar. In addition, there are isolated areas of brick which are cracked or spalled.

A comprehensive program amazing restoration will be required to rehabilitate the building façade. For the purposes of this analysis we have organized the repairs by elevation and year. Generally, the scope of work is consistent for each elevation.

Upon the conclusion, the masonry repairs it is recommended that a clear penetrating sealer be applied to all elevations to protect the masonry from further damage due to water infiltration.

The existing single pane double hung wood sash windows appeared to date to the original construction in 1925. The windows were observed to be in fair condition. On the exterior, the wood frames and trim were badly peeling and have areas that have begun to rot. It is recommended that the windows be replaced and that the wood trim be maintained and painted.

Observed issues, recommended corrections, estimated costs to correct and priority are as follows:

5.3	Exterior Walls						
Obs	servation/Issue/Recommended Correction		Estimate	ed Cost, Cate	gory and Year		
	Item	Qty	<u>Unit</u>	Unit Cost	Total Cost	Cat	Year
	Repair stair step and through brick						
	cracks in masonry chimney and						
1.	precast chimney capstones	100	SF	\$50	\$5,000	CE	2
	Repoint precast sill stones at						
	windows and recaulk window						
2.	perimeters	115	EA	\$275	\$31,625	CE	2
	Allowance for miscellaneous						
	pointing repairs (heads, sills,						
	cracked/spalled brick) at northeast						
3.	elevation - rear	1000	SF	\$35	\$35,000	CE	2
	Allowance for miscellaneous						
	pointing repairs (heads, sills,						
	cracked/spalled brick) at southwest						
4.	elevation - rear	750	SF	\$35	\$26,250	CE	2
	Allowance for screen repair and						
5.	replacement	35	EA	\$20	\$700	RM	1
	Allowance for repair/replacement of						
6.	damaged outside air louvers	8	EA	\$150	\$1,200	RM	1
	Clean and paint steel lintels at						
7.	windows and openings	115	EA	\$100	\$11,500	CE	2
	Repair minor damage and rot at						
8.	storage shed and paint	1	LS	\$1,500	\$1,500	RM	3
9.	Caulk vertical expansion joints	1000	LF	\$8	\$8,000	CE	2
10.	Contingency		10.0%		\$12,078	CE	
Tot	al				\$132,853		

5.4. Structural Systems

Description

The Property was originally constructed in 1988. The structural components of the building were largely concealed by interior finishes, with the exception of the mechanical room. It is assumed that the foundations are cast in place concrete, likely with strip and spread footings and a cast in place concrete slab on grade. Based on observations in the mechanical room and throughout the building it appears that the superstructure is load bearing concrete masonry block ("CMU") with steel bar joist supporing metal deck with cast in place floors and roof.

Observations/Comments

In general, the building structural systems appeared to be in good condition with no obvious signs of distress as might be evidenced by settlement, cracking or deflection.

Recommendations

There were no identified issues observed with the structural systems. As such there are no anticipated costs associated with these items.

Observed issues, recommended corrections, estimated costs to correct and priority are as follows:

5.4	Structural						
Ob	servation/Issue/Recommended Correction		Estimate	ed Cost, Cat	tegory and Year		
	Item	<u>Qty</u>	<u>Unit</u>	Unit Cost	Total Cost	Cat	Year
1.	No Noted Issues				\$0		
2.	2. Contingency		10.0%		\$0		
То	tal				\$0		

5.5. Interior Elements

Description

The Property has a variety of interior finishes and elements, most of which date to the original construction and others which have been replaced or upgraded over time.

Interior finishes of the classrooms, hallways, offices and common areas (cafeterioa, library, etc.)consist of painted concrete masonry block walls with 2'x4' acoustic ceiling tiles and VCT tile floors wiith 2'x4' lay in fluorescent light fixtures.

Restrooms were finished with 1"x1" ceramic floor tile, full height 4"x4" ceramic wall tile, 2'x4' acoustic ceiling tile wiith 2'x4' lay in fluorescent light fixtures.

Observations/Comments

Generally, the interior finishes appear in good condition and well maintained. Routine maintenance, repairs and replacement are anticipated throughout the term.

Recommendations

In the kitchen it was observed that there were several water damaged acoustic ceiling tiles. Replacement of damaged tiles is recommened in the near term.

Throuhout the building there were numerous areas where VCT floor tile was observed to be in fair to poor condition with damaged and missing tiles. An allowance to replace damaged floor tile throughout the building is provided in the near term.

Throuhout the building there were numerous areas where VCT floor tile was observed to be in fair to poor condition with damaged and missing tiles. An allowance to replace damaged floor tile throughout the building is provided in the near term.

At the northeast stairwell it was observed that there are several vinyl stair treads and reisers were damaged. An allowance to replace damaged stair treades is provided in the near term.

The 2'x4' acoustic ceiling tile in the classrooms at the second floor level were observed to be sagging significantly. The ACT tiles will require replacement in the near term.

The 2'x4' acoustic ceiling tile in the hallways at the first floor level were observed to be sagging significantly and numerous tiles were water damaged due to leaks in the hot water supply and return piping above the ceiling. The ACT tiles will require replacement in the near term.

The condition of the VCT tile flooring throuhout the building was observed to be in fair condition. Based on current failures it is anticipated that more significant replacement will be reuired at the midterm of the evaluation period.

The classrooms, hallways and common areas will require repainting during the midterm of the evaluation period.

Observed issues, recommended corrections, estimated costs to correct and priority are as follows:

5.5	Interior Finishes						
Obs	servation/Issue/Recommended Correction		Estimate	ed Cost, Cate	gory and Year		
	Item	<u> Qty</u>	<u>Unit</u>	Unit Cost	Total Cost	Cat	Year
	Replace water damaged ceiling tiles						
1.	at kitchen	60	SF	\$2.75	\$165	RM	1
	Replace kitchen ACT with ceramic						
2.	coated 2x4 tile	1,000	SF	\$2.75	\$2,750	RM	3
	Allowance to replace damaged floor						
3.	tile	1,000	SF	\$9.00	\$9,000	RM	2
	Replace damaged egress stair vinyl						
4.	treads	10	EA	\$100.00	\$1,000	RM	2
	Replace sagging 2x4 ceiling tiles at						
5.	classrooms	10,000	SF	\$2.75	\$27,500	CE	3
	Replace sagging/stained 2x4 ceiling						
6.	tiles at first floor hallways	7,500	SF	\$2.75	\$20,625	CE	3
7.	Allowance to replace VCT Flooring	17,000	SF	\$9.00	\$153,000	CE	10
							1,5,
	Replace walk-off mats at Main						10,
8.	Entrance	4	YR	\$650.00	\$2,600	RM	15
	Repaint second floor corridors &						
9.	common areas	11,300	SF	\$3.00	\$33,900	CE	7
10.	Repaint second floor classrooms	11,250	SF	\$3.00	\$33,750	CE	7
	Repaint first floor corridors &						
	common areas	12,500	SF	\$3.00	\$37,500	CE	8
	Repaint first floor classrooms	10,000	SF	\$3.00	\$30,000	CE	8
13.	Contingency		10.0%		\$35,179	CE	
Tot	al				\$386,969		

5.6. Specialties, Equipment and Special Construction

Description

Items under this category include metal toilet partitions, toilet accessories, horizontal window blinds, fire extinguishers and cabinets, building directory and signage. Also included are items such as kitchen equipment, public address systems or any other unique systems not generally captured elsewhere in this report.

Observations/Comments

The Property is equipped with a commercial kitchen and assiocaited equipment. Generally the kitchen equipment appeared to be in good condition for its age. Certain equipment will require repairs and repacements during the evaluation term.

Other systems including the paging and central clock systems were observed to be in fair condition. These systems appear to be original and are approximately thrity-tw years old.

Recommendations

There are several grease traps associated with the commercial kitchen. In addition to regularly emptying and cleaning, an allowance to maintain the traps is provided throughout the evaluation term.

The wearwashing station includes a commercial grade food disposal with a serial number indicating that the unit was manufactured in April 2008. Disposals have an expected useful life of between 10-12 years. The current disposal is 12 years old. An allowance to replace the disposal is provided early and again late in the evaluation term.

The walk-in refrigeration units (refrigerator and freezer) are thirty-two (32) years old. With proper maintenance it is possible for walk-in refrigeration units to function for extended periods beyond the expected useful life of 10-12 years. An allowance for periodic repairs and replacement of parts and components is provided.

The walk-in refrigeration units (refrigerator and freezer) are thirty-two (32) years old. While it is anticipated that these units can continue to perfrom for the long term, It is anticipated that the unit operate on outdated refrigerants and will require replacement at the midpoint of the evaluation term.

At the wearwashing station it was observed that the sides of the of the equipment as well as the power switch and disconnect were heavily corroded. It is recommended that theses corroded elements be replaced in the near term.

The electric hot water booster wearwashing stationwas observed to be in fair to poor condition. It is anticipated that the hot water boster will require replacement in the near term.

At the main office, it was observed that the Paging System was original and is thirty-two years. The system has significantly exceeded its expected useful life ("EUL") of 10-12 years. It is anticipated that the system will require replacement in the near term.

At the main office, it was observed that the Central Clock system appears to have been replaced since the original construction. During the evaluation period, the system will exceed its expected useful life ("EUL") of 10-12 years. It is anticipated that the system will require replacement in the midterm.

The exterior wood shed was observed to be in fair condition. With recommended maintenance as identified in this report, the shed should continue to provide another ten (10) years of service. It is anticipated that the shed will require full replacement at the midpoint of the evaluation term.

The flagpole was observed to be in poor condition with peeling paint and significant rusting. It is recommended that the flag pole be regularly scraped, cleansed and painted throughout the evaluation term.

Observed issues, recommended corrections, estimated costs to correct and priority are as follows:

5.6	Special Systems & Components						
Obs	servation/Issue/Recommended Correction						
	Item	<u>Qty</u>	<u>Unit</u>	Unit Cost	Total Cost	Cat	Year
1.	Clean and maintain kitchen grease traps	15	YR	\$250	\$3,750	RM	1-15
2.	Replace kitchen food disposal	2	EA	\$3,500	\$7,000	RM	2,14
3.	Misc. Walk-in cooler repairs (latches, hinges, motors, etc.)	4	YR	\$500	\$2,000	RM	1,4,7 ,10
4.	Replace walk-in cooler & Freezer	2	EA	\$10,000	\$20,000	CE	11, 13
5.	Repairs to Hobart dishwasher - corroded parts	1	LS	\$3,000	\$3,000	RM	1
6.	Replace dishwasher electric hot water booster	1	LS	\$3,000	\$3,000	RM	2
7.	Replace Paging System	1	LS	\$20,000	\$20,000	CE	2
8.	Replace Central Clock System	1	LS	\$15,000	\$15,000	CE	10
9.	Replace Shed	1	LS	\$5,000	\$5,000	RM	10
10	Scrape and paint flagpoles	5	YR	\$500	\$2,500	CE	1,4,7 ,10,
	Contingency		10.0%	7500	\$8,125		15
	contain perior		10.070		70,123		
Tot	al				\$89,375		

5.7. Vertical Transportation

Description

The Property is equipped with a 2,000 lb. two-stop hydraulic elevator rated at 100 FPM (feet per minute) manufactured by Dover Elevator. The elevator was inspected in June 2020 with a current inspection certificate through June 30, 2021. The elevator serves the first and second floors of the building.

Observations/Comments

The elevator appeared to be in good condition and has a current State Inspection Certificate. The elevator is thirty-two (32) years old and does not appear to have been modernized or upgraded. It was also observed that there was no door hardware on the elevator machine room to secure the elevator hydraulic equipment.

Recommendations

The elevator machine room did not have any door hardware installed to secure the room. It is recomende that door hardware be installed in the near term.

Hydraulic elevators have and expected useful life ("EUL") of 20-25 years. The elevator will require a full modernization in the early portion of the evaluation term.

Observed issues, recommended corrections, estimated costs to correct and priority are as follows:

5.7	. Vertical Transportation						
Ob	servation/Issue/Recommended Correction		Estimate	ed Cost, Cat	egory and Year		
	Item	Qty	<u>Unit</u>	Unit Cost	Total Cost	Cat	Year
1.	Install door hardware at elevator machine room	1	EA	\$350	\$350	RM	1
2.	Modernize Elevator	1	LS	\$110,000	\$110,000		5
3.	Contingency		10.0%		\$11,035	CE	
То	tal				\$121,385		

5.8. Heating, Ventilation and Air Conditioning

Description

The Property is the central plant for heating for the entire complex including the Administration Building, Gymnasium and Auditorium as well as the Sheffield Elementary School. Two steam boilers provide steam to the Administration Building and Gymnasium and Auditorium while a steam to hot water heater provides hot water toe the Elementary School. Hot water heating for the Elementary School is provided by unit ventilators, convectors and baseboard radiation. Outside air for the kitchen and library is provided by two (2) gas fired constant volume, 100% outside air roof top units. Air conditioning is provide to the cafeteria and school offices by a single air-cooled direct expansion ("DX") roof top unit with gas fired heat.

Heating & Ventilation

Heating is provided by hot water radiation via unit ventilators, convectors and baseboard radiation. Hot water is generated by steam to hot water heat exchanger connected to two steam boilers located in the boiler room of the Sheffield Elementary School. The boiler plant consists of one (1) Weil McLain dual fuel (oil and antural gas) steam boiler rated at 2,304MBH and one (1) Weil McLain oil fired steam boiler rated at 2,452 MBH.

Fuel oil for the boilers is provided via a 10,250 gallon underground storage tank located at the rear of the building.

Two (2) five horsepower hot water circulating pumps manufactured by Taco feed hot water to the primary loop that serves the unit ventilators, convectors and baseboard radiation systems.

Outside air is supplied viar two (2) gas fired constant volume, 100% outside air roof top units manufactured by Reznor.

Cooling is provide at the cafeteria and offices by an air cooled, DX roof top unit with gas fired heat manufactured by American Standard which was installed in 2018.

Building Management System

The Property is equipped with a Tridium Niagra Building Management System manufactured by Schneider Electric. The BMS has limited control capability and operatis only the ot water heat exchanger and the hot water heat circulating pumps.

Temperature control is provided by localized thermostats which operate pneumatic controlled actuators and valves. The pneumatic control systems are operated via compressed air generated by a reciprocating compressor manufactured by Emglo which is located in a the Sheffield Elementary School boiler room. The pneumatic system is equipped with an air dryer manufactured by Hankison which is located in proximity to the compressor.

Observations/Comments

It was reported that both boilers have been replaced since the original construction with one unit replaced in 1992 and the other in 2014. The hot water heating systems including the boilers, heat exchanger and hot water circulating pumps appeared to be in good condition.

The current Reznor ouside air units appeared to be new and were likely installed between 2017-2019, based upon information contained in a report prepared by NV5/Sebesta in May 2016 which identified the units at that time as being original to the 1988 construction. These units appeared to be in good condition.

The roof top air conditioning unit that serves the cafeteria and offices was replaced in 2018 and appeared to be in good condition.

The BMS system is very limited in its capabilities, however the system was recently upgraded to a Tridium Niagra based system manufactured by Schneider Electric.

Recommendations

The air compressor for the pneumatic system appears to be in generally good condition. Reciprocating compressors have an expected useful life ("EUL) of 15 years. The compressor generally appeared in good condition but approaching its useful life. An allowance to rebuild the compressor to extend its service life is projected in the near term.

The air compressor for the pneumatic system appears to be relatively new. Reciprocating compressors have an expected useful life ("EUL) of 15 years. It is anticipated, however that the compressor will require replacement at the midpoint of evaluation term.

The air dryer for the pneumatics system appeared to be in good condition and has a similar expected useful life ("EUL") of 15 years. It is anticipated that the air dryer wil require replacement in the near term.

The hot water supply pipes directly above the hot water circulating pumps were observed to be corroded. The sections of corroded pipe should be replaced in the near term.

The kitchen has a ceiling mounted gas fired unit heater manufactured by Reznor. Gas fired uit heater have and expected useful life ("EUL") of 20-25 years. It is anticipated that this unit will require replacement in the near term.

The classrooms are heated by unit heater manufactured by MSI, These units are thirty-two (32) years old which exceeds the expected useful life for the fans and motors. An allowance for limited repairs to the unit ventilators is provided throughout the evaluation term.

The energy management system was reportedly replaced with the new Schneider Electric system in the past few years. The system appeared in good condition. It is anticipated that routine repairs will be required during the evaluation term.

Energy management systems operating software similar to the Tridium Niagra system typically undergo software upgrades every five years. An allowance for two upgrades is provided in the near term and midpoint of the evaluation term.

The head end of an energy management system which includes the host computer typically require replacement as the operating systems for the computers become outdated. The existing head end will be approximately fifteen (15) years old at the midpoint of the evaluation term when it is recommended that the head end be replaced.

The Property has numerous roof mounted exhaust fans which have an expected useful life of 15 years. It is recommended that the fans be replaced at the end of the evaluation period.

The two Taco hot water circulating pumps appear to be in good condition. It is recommended that the pumps be rebuilt in the near term to extend ther useful life.

Circulating pumps have and expected useful life ("EUL") of 20-25 years. The existing Taco pumps appear to have been replaced since the original construction and are anticipated to required replacement at the midpoint of the evaluation term.

It was reported and observed that hot water supply and return piping was originally installed without sepreration of dissimilar metals. This condition results in corrosion of the pipe, typically manifesting itself intitially at fittings. This condition exists, and a program to begin installing dielectric unions between dissimilar metals has begun. A program to complete the installation of dielectric unions throughout the building is recommended.

Observed issues, recommended corrections, estimated costs to correct and priority are as follows:

5.8	Heating, Ventilation & Air Conditioning						
Ob	servation/Issue/Recommended Correction		Estimat	ed Cost, Cate	gory and Year		
	Item	<u>Qty</u>	<u>Unit</u>	Unit Cost	Total Cost	Cat	Year
	Rebuild pneumatic system						
1.	compressor pumps	1	EA	\$750	\$750	RM	5
	Replace pneumatic system						
2.	compressor	1	EA	\$5,500	\$5,500	RM	10
3.	Replace Pneumatic Air Dryer	1	EA	\$850	\$850	RM	5
	Repair and reinsulate corroded						
	copper pipe above hot water						
4.	circulating pumps	1	EA	\$250	\$250	RM	1
5.	Replace kitchen REZNOR unit	1	EA	\$1,400	\$1,400	RM	5
6.	Allowance for Univent repairs	15	YR	\$1,500	\$22,500	RM	1-15
	Allowance for Energy Management						
7.	System Repairs	2	YR	\$1,000	\$2,000	RM	5,10
8.	Energy Management System Head End Upgrade	2	EA	\$2,500	\$5,000	RM	5,15
9.	Replace Energy Management System Head End	1	EA	\$10,000	\$10,000	CE	10
				. , , ,	, , , , , , ,		10,
							12,
10.	Replace Exhaust Fans	3	EA	\$750	\$2,250	RM	14
	Rebuild heating hot water circulation						
11.	pumps	2	EA	\$500	\$1,000	RM	5

5.8	Heating, Ventilation & Air Conditioning						
Ob	servation/Issue/Recommended Correction		Estimate	ed Cost, Cate	egory and Year		
	Item	<u>Qty</u>	<u>Unit</u>	Unit Cost	Total Cost	Cat	Year
	Replace heating hot water						
12.	circulation pumps	2	EA	\$1,200	\$2,400	RM	10
13.	Allowance to replace VFD's	2	EA	\$2,000	\$4,000	RM	8,10
	Replace fittings on hot water heating distribution pipe with dielectric						
14.	unions	1	LS	\$15,000	\$15,000	CE	2
15.	Contingency		10.0%		\$7,290	RM	
Tot	al				\$80,190		

5.9. Plumbing Systems

Description

Domestic water service is provided to the building by street pressure from the Town of Montague via a three inch (3") incoming water service located in the Sprinkler Room on the first floor. The incoming water service is equipped with a backflow preventor.

Domestic hot water for the is provided by two (2) of two 80 gallon gas fired hot water heaters manufactured by HTP and installed in 2017.

Domestic water service was reported to be all copper pipe which was consistent with areas or pipe that was observed. Sanitary service was reported to be cast iron and exits the building to the Town of Montague sewer system.

Storm water collected at the roof exits the building via roof drains that connect to the Town of Montague stormwater system.

Observations/Comments

The plumbing systems appeared in good condtion.

Recommendations

The domestic hot water heaters were replaced in 2017 and appeared in good condition. The expected useful life for hot water heaters is 10-12 years. It is recomedned that the hot water heater be replaced duing the midpoint of the evaluation term.

The incoming domestic water service is equipped with a backflow preventor as required by code. Backflow preventors should be regularly inspected and maintained. An allowance for period maintenance of the back flow preventer has been provided throughout the term.

Diesel fuel oil for operation of the boiler is stored in a 10,250 gallon underground storage tank ("UST"). It is recommended that periodic pressure testing be performed to validate the integrity of the tank and confirm that the tank is not leaking.

The fuel oil for the boiler system operation is stored in a 10,200 gallon underground storage tank located to the rear of the Property. The age and construction (fiberglass or steel) of the tank are unknown. Underground storage tanks typically have and expected useful life ("EUL") of 25-30 years. Provided that the tank tightness test results continue to confirm the tank is not leaking it is recommended that the replacement of the tank be anticipated at the end of the evaluation term.

At the second floor boy's restroom, one of the three urinals has been closed off. It is recommended that the urinal be reapired and place back in service.

Observed issues, recommended corrections, estimated costs to correct and priority are as follows:

5.9	Plumbing						
Ob:	servation/Issue/Recommended Correction		Estimate	ed Cost, Cate	egory and Year		
	ltem	Qty	Unit	Unit Cost	Total Cost	Cat	Year
1.	Replace Gas Fired Hot Water Heaters	2	EA	\$2,500	\$5,000	RM	9
							1,4,7
	Maintain Domestic Water Back Flow						,10,
2.	Device	5	YR	\$250	\$1,250	RM	13
	Perform tank tightness test for oil						1,5,
3.	tank	3	EA	\$750	\$2,250	RM	10
4.	Replace UST	1	EA	\$30,000	\$30,000	CE	15
	Repair broken urinal at 2nd floor						
5.	boys restroom	1	LS	\$500	\$500	RM	1
6.	Contingency		10.0%		\$3,900	CE	
Tot	tal				\$42,900		

5.10. Fire Protection

Description

The Property is fully protected with a wet sprinkler system, An incoming four inch (4") fire services enters the building in the Sprinkler Control room from the Town of Montague water department. The sprinkler system operates on street pressure and is equipped with a back flow preventor as required by code.

In the kitchen, the exhaust hoods above the ovens and ranges was observed to be equipped with an Ansul fire protection system.

Observations/Comments

The wet sprinkler system was observed to be in good condition and the kitchen system appeare to be in good condition with up to date inspection certificates.

Recommendations

The kitchen Ansul fire protection system requires regular annual inspection and repairs as required. An allowance for annual repairs is carried throughout the evaluation period.

The incoming fire service is equipped with a backflow preventor as required by code. Backflow preventors should be regularly inspected and maintained. An allowance for period maintenance of the back flow preventer has been provided throughout the term.

Observed issues, recommended corrections, estimated costs to correct and priority are as follows:

5.1	0 Fire Protection						
Observation/Issue/Recommended Correction			Estimated Cost, Category and Year				
	Item	<u>Qty</u>	<u>Unit</u>	Unit Cost	Total Cost	Cat	Year
1.	Maintain Kitchen Ansul System	15	YR	\$1,000	\$15,000	RM	1-15
							1,4,7
							10
2.	Maintain Sprinkler Back Flow Device	5	YR	250	\$1,250	RM	13
3.	Contingency		10.0%		\$1,625	RM	
То	Total				\$17,875		

5.11. Electrical System, Telephone & Security

Description

Electrical service is provided by the utility company, Eversource via an exterior surface mounted transformer located at the southwest corner of the site. The utility company transformer feeds a 1,200 amp, 208Y/120 volt, three phase, 4 wiremain switchboard manufactured by Siemens. Within the main switchboard, there circuit breakers feeding the elevator, the Aminstrative panel, the boiler room panel, panels A and B, the kitchen as well as the Old School and Connector Corridor panels (shared services to the Administration Building and the Gymnasium and Auditorium).

Observations/Comments

Generally the electrical systems at the Property appeared in good condition. The main switchboard is co-located with several pieces of other mechanical and plumbing equipment in the boiler room. It was observed that the exterior cabinet of the switchgear has developed rust indicating that the environment is damp. There was also notable rust staining on the floor slab below and around the switchboard. Moisture and corrosion are not conducive to the longterm performance of electrical components.

In the kitchen, it was observed that there was an abandoned floor outlet shich was covered with duct tape and the power switch and disconnect at the warewasing station were corroded.

Recommendations

In the kitchen the abandoned floor outlet which is covered with duct tape is a potential hazard. It is recommended that he outled be repaired, repkaced or permanently disconnected and capped.

The power switch and disconnedt at the warewashing station are corroded and should be replaced with thought given to potential relocation to avoid future wt conditions that are contributing to the corrosoion.

At electrical panel P3, Section 6 it was observed that there are missing circuit breakers or blank outs in the face of the panel. This is a potential hazard and breakers or blank outs should be installed.

The main switchboard has not indication of previous infra-red inspection. Good facility management practice dictates that electrical distribution panels be regularly inspected by infra-red camera to identify failing circuit breakers and loose connections. It is recommended that infra-red testing be performed every second year throughout the term. This is particularly important given the potentially corrosive environment in which the switchboard is located.

Infra-red test results may require repair and or replacement of circuit breakers or maintenance on connections. An allowance for repairs identified by the infra-red tests is provided in years where testing is performed.

The Main Switchboard is thirty-two (32) years old. Molded case circuit breakers hace an expected useful life ("EUL") of 15-20 years. It is recommended that the molded case circuit breakers be replaced during the evaluation term.

Observed issues, recommended corrections, estimated costs to correct and priority are as follows:

5.1	1 Electrical, Telephone & Security						
Observation/Issue/Recommended Correction			Estimated Cost, Category and Year				
	Item	<u>Qty</u>	<u>Unit</u>	Unit Cost	Total Cost	Cat	Year
	Repair, replace or disconnect floor						
	outlet at kitchen (covered w/ duct						
1.	tape)	1	EA	\$250	\$250	RM	1
	Replace corroded electrical						
	connections and service panel at	_		44.000	44.000		
2.	dishwasher	1	LS	\$1,000	\$1,000	RM	1
	Install breaker blank outs at open						
_	slots in Panel P3 Section 6 second	1	1.0	¢2F0	ćaro	D 1 4	
3.	floor	1	LS	\$250	\$250	RM	1
							1,4,7
	Perform Infrared Test Inspection of						10
4.	MSB and Distribution	5	YR	\$3,500	\$17,500	RM	13
							1,4,7
	Allowance for minor corrective						10
5.	repairs	5	YR	\$1,500	\$7,500	RM	13
							F 7 0
							5,7,9 11
	Replace molded case disconnect						13
6.	breakers at main switchboard	6	FA	\$2,500	\$15,000	RM	16
7.	Contingency	U	10.0%	32,300	\$15,000	RM	10
, .	Contingency		10.076		→+, ±30	IVIVI	
To	tal				\$45,650		

5.12. Lighting

Description

The lighting systems in the building are a combination of surface mounted, suspended, or lay in type florescent light fixtures.

Observations/Comments

Generally, the lighting systems appeared to be in good condition and should provide adequate service for a minimum of ten years with continued repairs and maintenance.

Recommendations

There were no identified issues observed with the lighting systems

Observed issues, recommended corrections, estimated costs to correct and priority are as follows:

5.1	2 Lighting						
Observation/Issue/Recommended Correction			Estimate				
	Item	Qty	<u>Unit</u>	Unit Cost	Total Cost	Cat	Year
1.	No Noted Issues				\$0		
2.	Contingency		10.0%		\$0		
Total					\$0		

5.13. Fire Alarm & Life Safety

Description

The Property is provided with a a Silent Knight SK-5208 system manufactured by Honeywell which is located in the boiler room of the Sheffield Elementary School.. The fire alarm system is not fully addressable and all areas the Elementary School Building are identified as Zone 1-5 by the annunciator panel.

There are battery operated illuminated exit signage and emergency lighting provided throughout the building.

Observations/Comments

It appears that the fire alarm had end was recently replaced and generally, the fire alarm system and life safety systems appeared to be in good condition. The fire alarm head end is co-located with several pieces of other mechanical and plumbing equipment in the boiler room. Base on observations the boiler room is a damp environment. Moisture and corrosion are not conducive to the longterm performance of electrical components.

Recommendations

Fire alarm system head ends have an expected useful life of 10-15 years. It appears the the existing head end was recently installed, but the age of the system is unknown. It is anticipated that the head end will require replacement during the midpoint of the evaluation term.

It was observed that more than half of the heat and smoke detectors in the classrooms have been replaced. Based on the number of devices which have been replaced it is anticipated that the remaining decvices will require replacement in the near term.

There were several horn/strobe devices which were observed to have non-ADA compliant frosted lenses. It is recommended that all non-compliant hor/strobe devices be replaced in the near term.

In the second floor mechanic room adjacent to the bnoys restroom, it was observed that the wall between the restroom and mechanical room had been opened, presumably to perform rpairs on the unirnal which is out of service in the restroom. It is recommended that the wall be repaired to restore the rating between the rooms.

Observed issues, recommended corrections, estimated costs to correct and priority are as follows:

5.1	3 Fire Alarm, Life Safety & Code						
Observation/Issue/Recommended Correction			Estimated Cost, Category and Year				
	Item	<u>Qty</u>	<u>Unit</u>	Unit Cost	Total Cost	Cat	Year
1.	Replace Fire Alarm Head End	1	EA	\$30,000	\$30,000	CE	7
	Replace heat/smoke detectors in						
2.	classrooms	22	EA	\$1,500	\$33,000	CE	1,2
	Allowance for repairs/replacement						3,6,9
	of damaged smoke and heat						,12,
3.	detectors	5	YR	\$2,000	\$10,000	RM	15
	Replace frosted horn/strobe						
4.	devices to be ADA compliant	20	EA	\$750	\$15,000	RM	1
	Repair open holes in walls at						
	second floor mechanical room to						
5.	boys restroom	1	LS	\$500	\$500	RM	1
6.	Contingency		10.0%		\$8,850	CE	
То	tal				\$97,350		

5.14. Accessibility Review

Description

The Massachusetts Architectural Access Board Regulations (521 CMR) and the Americans with Disabilities Act 2010 Standards for Accessible design are applicable to the Property, and therefore all public spaces are required to be accessible in accordance with 521 CMR and the ADA.

Observations/Comments

The Property has an accessible entrance at grade at the north west corner from the parking lot and at the the front main entrance. The building has elevator service between the first and second floors providing an accessibl path of travel to all areas of the school as well ass accessible restrooms.

Recommendations

The cast in place concrete sidewalk from the parking are to the northwest entrance to the school was observed to have cross slope in excess of ADA requirements. It is recommended that the sidewalk be regraded and repaved to provide a fully accessible path to the school from the parking area.

The parking lot was reported to have 92 parking spaces. The requirements of the ADA call for four (4) van accessible parking spaces. It is recommended that the existing handicapped spaces and the adjacent regular partking spaces be re-striped to accommodate the required ADA spaces.

At the second floor boys restroom it was observed that there is a missing grab bar at the accessible toilet. It is recommended that a new grab bar be installed as required.

At the mens handicapped restroom on the first floor it was observed that the toilt paper dispenser was installed at the incorrect height. It is recommended that he toilet paper dispenser be removed and reinstalled at the appropriate height.

Observed issues, recommended corrections, estimated costs to correct and priority are as follows:

5.1	4 Accessibility Review						
Observation/Issue/Recommended Correction		Estimated Cost, Category and Year					
	Item	<u>Qty</u>	<u>Unit</u>	Unit Cost	Total Cost	Cat	Year
	Modify sidewalk at west entrance						
1.	to provide properly sloped ADA	500	SF	\$15	\$7,500	RM	1
	Provide 4 ADA accessible parking						
2.	spaces	4	EA	\$250	\$1,000	RM	1
	Replace missing grab bar at second						
3.	floor boys restroom	1	EA	\$350	\$350	RM	1
	Re-install toilet paper dispensers at						
4.	men's HC restroom at ADA height	1	EA	\$250	\$250	RM	1
	Install ADA compliant signage						
5.	throughout	50	EA	\$250	\$12,500	CE	1
6.	Contingency		10.0%		\$2,160	CE	
Tot	tal				\$23,760		

5.15. Environmental

Description

This Property Condition Assessment explicitly excludes any investigation of the environmental condition of the Property and is not a Phase I Environmental Site Assessment. PCA360 is not an environmental engineering firm and therefore makes no representation or warranty regarding environmental matters at the Property.

Observations

Not included in Scope of Report.

Recommendations

Not Included in Scope of Report

Observed issues, recommended corrections, estimated costs to correct and priority are as follows:

5.1	5 Environmental						
Observation/Issue/Recommended Correction			Estimate				
	Item	Qty	<u>Unit</u>	Unit Cost	Total Cost	Cat	Year
1.	Not In Scope				\$0		
2.	Contingency		10.0%		\$0		
То	tal				\$0		

6 PHOTOGRAPHS

5.1 Site Features at Grade























5.2 Roofing





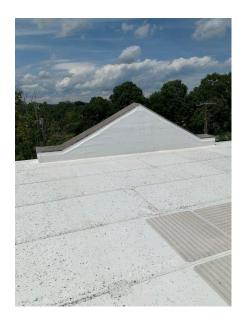


























a. Exterior Walls











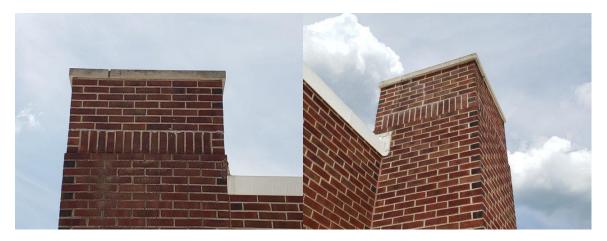




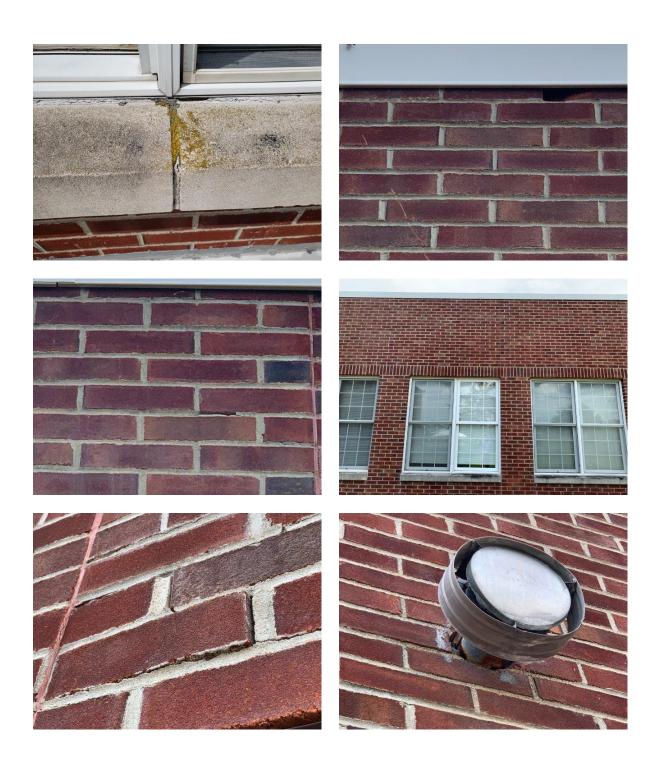








5.2 Roofing

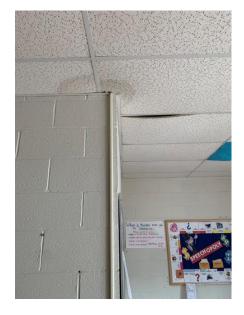








5.5 Interior Elements













































5.6 Specialties, Equipment and Special Construction





































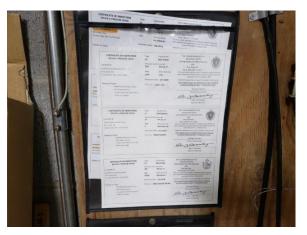








5.9 HVAC

























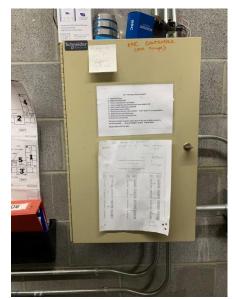






















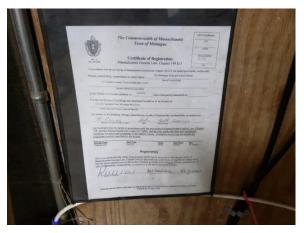
















5.9 Plumbing



































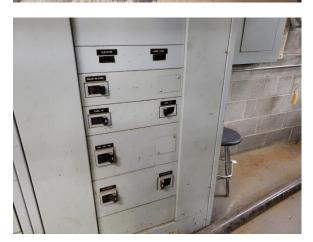
5.11 Electrical System

































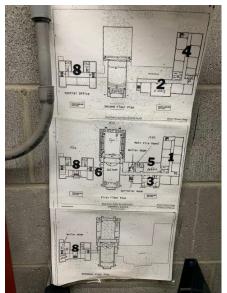


5.13 Fire Alarm & Life Safety











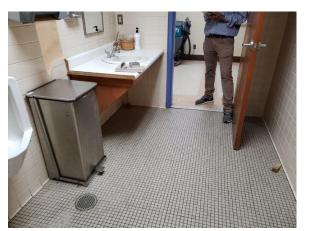






5.14 Accessibility & Code





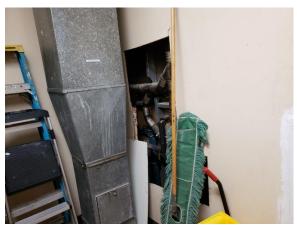






















7 LIMITING CONDITIONS

Potomac Capital Advisors, Inc. conducted this due diligence Property Condition Assessment to opine on the subject's general physical condition in accordance with our agreement for this work.

The scope of this study was limited to a walk-through visual observation only of those areas that were readily observable and easily accessible. Tests, exploratory or destructive probing, exhaustive studies, removal or disassembly of any system or construction, or dismantling or operating of electrical, mechanical, or conveyance equipment were not performed. It does not include an in-depth system/component problem analysis or study, preparing engineering calculations of the structural mechanical, electrical or other systems to determine compliance with any drawings that may have been submitted or with commonly accepted design or construction practice. Not all typical areas such as corridors or toilet rooms were surveyed; only a sampling of such areas.

Excluded from the scope of this survey was any seismic evaluation of the building.

No responsibility is assumed for matters of a legal nature such as building encroachment, easements, zoning issues, or a compliance with the requirements of governmental agencies having jurisdiction.

Potomac Capital Advisors, Inc. assumes no responsibility for the accuracy or completeness of information provided by others, nor is Potomac Capital Advisors, Inc. responsible for any patent of latent defects, which an owner or his agent may have withheld from Potomac Capital Advisors, Inc., whether by non-disclosure, passive concealment or fraud.

Potomac Capital Advisors, Inc.'s observations, opinions and this report are not intended, nor should they be construed, as a guarantee or warranty, express or implied, regarding the property's condition or building code compliance. Potomac Capital Advisors, Inc.'s opinions are based solely upon those areas that we observed on the day of our site visit and information resulting from our interviews and research. Actual performance of individual components may vary from a reasonable expected standard and will be affected by circumstances, which occur after the date of our site visit.

Services associated with the identification and elimination of hazards associated with hazardous and toxic materials, including asbestos, lead paint and PCBs are not included within the scope of this evaluation.